PRODUCTION OF 1-HEXENE

Patent number: JP10007594

Publication date: 1998-01-13

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Classification:

- international: C07C11/107; B01J31/12; B01J31/14; B01J31/22; C07C2/30; C07C2/32; C07C7/148

- european:

Application number: JP19960155804 19960617

Priority number(s):

Abstract of **JP10007594**

PROBLEM TO BE SOLVED: To produce 1-hexene without lowering the selectivity of the product or causing the entrainment of a deactivation agent to unreacted ethylene by trimerizing ethylene in the presence of a chromium-based catalyst and completely deactivating the catalyst with a deactivation agent in two stages.

SOLUTION: Ethylene is trimerized in the presence of a chromium-based catalyst composed of a chromium compound and an alkyl metal compound. After completing the trimerization reaction, a deactivation agent is added to the liquid reaction product in an amount of >=1 mol-equivalent based on the chromium compound in the chromium-based catalyst and <3 mol-equivalent based on the total molar number of metals in the chromium-based catalyst to effect the deactivation of the chromium compound in the chromium-based catalyst. Thereafter, 3-2,000 mol-equivalent of a deactivation agent is added to the liquid reaction product to effect the complete deactivation of the chromium-based catalyst and obtain the objective 1-hexene useful as a comonomer for a linear low-density polyethylene or a raw material for plasticizers.
